

XGHY2-12 AC Metal-clad Solid Ring Main Unit

Summary

XGHY7-12 AC Metal-clad Solid Ring Main Unit is new generation of ring network switching equipment to meet the 10KV voltage level, the current range of 1250A and below in the medium voltage distribution system, instead of the traditional SF6 inflatable ring network cabinet. It is relatively more environmentally friendly and reliable. The switchgear conforms to GB1984 《HV AC Circuit Breaker》, GB1985 《HV AC Disconnecter and Earthing switch》, GB 3906 《3.6kV-40.5kV AC Metal-clad enclosed Switchgear and Controlgear》, GB/T4208 《Enclosure Protection Grade (IP code)》, GB/T 11022 《Standard Common Specification of Switchgear and Controlgear》, etc..



Ambient Condition

- 1 Environmental air temperature: $-45^{\circ}\text{C} \sim +45^{\circ}\text{C}$;
- 2 Altitude $\leq 2000\text{m}$;
- 3 Humidity condition: Humidity condition: daily average value $\leq 95\%$;
monthly average value $\leq 90\%$;
- 4 Saturated vapor pressure: daily average value $\leq 2.2\text{kPa}$; monthly average value $\leq 1.8\text{kPa}$;
- 5 Earthquake intensity: not exceeding 8 degree;
- 6 Installation site: without fire risk, explosion hazard, heavy pollution, chemical corrosion and violent vibration. Vertical bank is not more than 5° .

Model

X	G	HY2-12	(V)	/T	630	-	20	AC Metal-clad Solid Ring Main Unit
								Rated short circuit breaking current (kA)
								Rated current (A)
								Spring operation
								Circuit breaker cabinet
								Rated voltage (kV)
								Design serial No.
								Fixed
								Metalclad metal-enclosed switchgear

Technical Parameters

No.	Item		Unit	Data
1	Rated voltage		kV	12
2	Rated current		A	630
3	Rated frequency		Hz	50
4	Rated short circuit breaking current		kA	20
5	Rated short circuit making current		kA	50
6	Rated cable charging current		A	25
7	Thermal stability current (effective value)	Main loop (4s)	kA	20
		Earthing switch & earthing loop (4s)		
8	Dynamic current (peak)	Main loop	kA	50
		Earthing switch & earthing loop		
9	Rated insulation level(phase to ground / fracture)	1min P.F. Withstand(phase to ground / fracture)	kV	48/42
		lightning impulse withstand voltage(phase to ground / fracture)		85/75
10	Main circuit resistance		$\mu \Omega$	<100
11	Earthing circuit resistance		$\mu \Omega$	<60
12	Mechanical life		time	30000

Main Feature

1. The circuit breaker adopts sealed pole design of double cavity structure, which will be of high reliability with the breaking capacity of circuit breaker vacuum interrupter, grounding vacuum interrupter and conductive parts are sealed pouring, no bare charged body, isolated fracture using knife, can clearly observe the isolation position.
2. The end of the solid pole is adopted the standard European cable head, and the lower outlet has inductive net, which can effectively reflect the live state of the inlet and outlet.
3. The switchgear adopts the unit design, and the same modules have good versatility and interchangeability. The modules are assembled by fastening bolts, which can be easily replaced

when needed.

4. The main circuit breaker adopts the spring operated mechanism developed by the company independently. It has reliable electric and manual energy storage, closing and opening function, as well as reliable mechanical status indication. The grounding arc extinguishing port and the isolation port are equipped with the isolated earthing mechanism which is independently developed by the company. It has the ability of reliable closing and grounding connection.
5. The two institutions have relatively reliable mechanical linkage relationship, meet the requirements of the "five prevention" linkage.

Basic Structure

